

Progesterone Receptor(PR) (ABT005) Mouse mAb

CatalogNo: YM4939 **Recombinant** 

Key Features

Host Species

- Mouse

Reactivity

- Human, Mouse, Rat

Applications

- IHC, WB, IF, ELISA

MW

- 118kD (Calculated)
99kD (Observed)

Isotype

- Mouse IgG1/Kappa

Storage

Storage*

-15°C to -25°C/1 year(Do not lower than -25°C)

Formulation

PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

Recommended Dilution Ratios

IHC 1:100-500**WB 1:500-2000****IF 1:100-500****ELISA 1:1000-5000**

Basic Information

Clonality

Monoclonal

Clone Number

ABT005

Immunogen Information

Immunogen

Synthesized peptide derived from human Progesterone Receptor(PR) AA range: 200-300

Specificity

The antibody can specifically recognize human PR protein, including PR-A and PR-B. In western blotting of Hela cell lysate, there shows a 99 kDa band detected by the antibody.

| Target Information

Gene name PGR NR3C3

Protein Name Progesterone Receptor(PR)

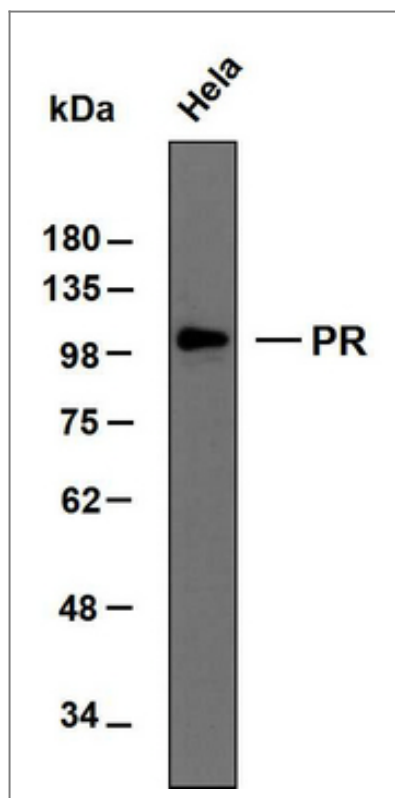
Organism	Gene ID	UniProt ID
Human	5241 ;	P06401 ;

Cellular Localization Nuclear

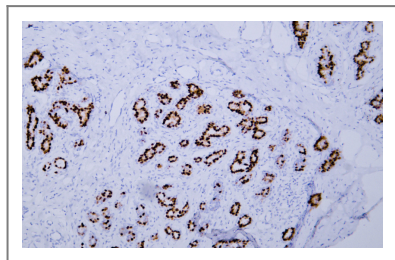
Tissue specificity In reproductive tissues the expression of isoform A and isoform B varies as a consequence of developmental and hormonal status. Isoform A and isoform B are expressed in comparable levels in uterine glandular epithelium during the proliferative phase of the menstrual cycle. Expression of isoform B but not of isoform A persists in the glands during mid-secretory phase. In the stroma, isoform A is the predominant form throughout the cycle. Heterogeneous isoform expression between the glands of the endometrium basalis and functionalis is implying region-specific responses to hormonal stimuli.

Function Domain:Composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-terminal steroid-binding domain.,Function:Isoform A is inactive in stimulating c-Src/MAPK signaling on hormone stimulation.,Function:The steroid hormones and their receptors are involved in the regulation of eukaryotic gene expression and affect cellular proliferation and differentiation in target tissues. Progesterone receptor isoform B (PRB) is involved activation of c-SRC/MAPK signaling on hormone stimulation.,online information:Progesterone receptor entry,PTM:Phosphorylated on multiple serine sites. Several of these sites are hormone-dependent. Phosphorylation on Ser-294 occurs preferentially on isoform B, is highly hormone-dependent and modulates ubiquitination and sumoylation on Lys-388. Phosphorylation on Ser-102 and Ser-345 also requires induction by hormone. Basal phosphorylation on Ser-81, Ser-162, Ser-190 and Ser-400 is increased in response to progesterone and can be phosphorylated in vitro by the CDK2-A1 complex. Increased levels of phosphorylation on Ser-400 also in the presence of EGF, heregulin, IGF, PMA and FBS. Phosphorylation at this site by CDK2 is ligand-independent, and increases nuclear translocation and transcriptional activity. Phosphorylation at Ser-162 and Ser-294, but not at Ser-190, is impaired during the G(2)/M phase of the cell cycle. Phosphorylation on Ser-345 by ERK1/2 MAPK is required for interaction with SP1.,PTM:Sumoylation is hormone-dependent and represses transcriptional activity. Sumoylation on all three sites is enhanced by PIAS3. Desumoylated by SENP1. Sumoylation on Lys-388, the main site of sumoylation, is repressed by ubiquitination on the same site, and modulated by phosphorylation at Ser-294.,PTM:Ubiquitination is hormone-dependent and represses sumoylation on the same site. Promoted by MAPK-mediated phosphorylation on Ser-294.,similarity:Belongs to the nuclear hormone receptor family.,similarity:Belongs to the nuclear hormone receptor family. NR3 subfamily.,similarity:Contains 1 nuclear receptor DNA-binding domain.,subcellular location:Mainly nuclear.,subcellular location:Nucleoplasmic shuttling is both hormone- and cell cycle-dependent. On hormone stimulation, retained in the cytoplasm in the G(1) and G(2)/M phases.,subunit:Interacts with SMARD1 and UNC45A. Interacts with CUEDC2; the interaction promotes ubiquitination, decreases sumoylation, and represses transcriptional activity. Interacts with PIAS3; the interaction promotes sumoylation of PR in a hormone-dependent manner, inhibits DNA-binding, and alters nuclear export. Interacts with SP1; the interaction requires ligand-induced phosphorylation on Ser-345 by ERK1/2 MAPK.,

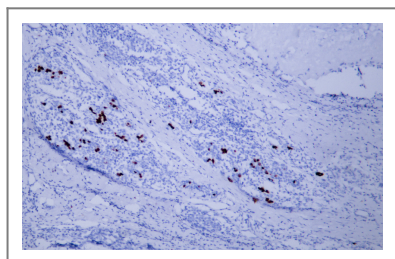
| Validation Data



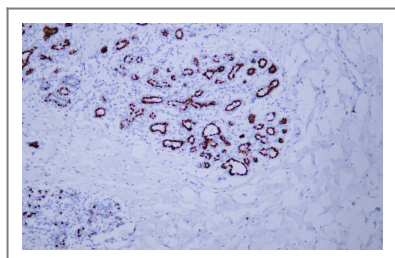
Whole cell lysates of HeLa were separated by 8% SDS-PAGE, and the membrane was blotted with anti-PR antibody. The HRP-conjugated anti-Mouse IgG antibody was used to detect the antibody.



Human breast carcinoma tissue was stained with Anti-Progesterone Receptor (ABT005) Antibody



Human breast carcinoma tissue was stained with Anti-Progesterone Receptor (ABT005) Antibody



Human breast carcinoma tissue was stained with Anti-Progesterone Receptor (ABT005) Antibody

| Contact information

Orders: order@immunoway.com
Support: tech@immunoway.com
Telephone: 877-594-3616 (Toll Free), 408-747-0185
Website: http://www.immunoway.com
Address: 2200 Ringwood Ave San Jose, CA 95131 USA



Please scan the QR code
to access additional
product information:
**Progesterone
Receptor(PR)
(ABT005) Mouse
mAb**

For Research Use Only. Not for Use in Diagnostic Procedures.

[Antibody](#) | [ELISA Kits](#) | [Protein](#) | [Reagents](#)